

Office of Water News Clips – March 4, 2014

Americans assume water is plentiful

Outlet: Albuquerque Journal - Online

Americans use twice the amount of water they think they do and appear to be particularly oblivious about how much H₂O they flush down the toilet on a daily basis, according to new research.

In a paper published online Monday in the journal PNAS, a researcher concluded that Americans underestimated their water use by a factor of 2 and were only slightly aware of how much water goes into growing the food they eat.

“In general, people tend to underestimate water by a very large magnitude,” said study author Shahzeen Attari, an assistant professor in the Department of Public and Environmental Affairs at Indiana University.

The study's conclusions were based on an Internet survey of 1,020 people and come amid a national drought that extends from the Pacific Coast to portions of the Mississippi Valley, with the most severe conditions in California.

“Most Americans assume that water supply is both reliable and plentiful,” Attari wrote. “However, research has shown that, with climate change, water supply will become more variable due to salinization of groundwater and increased variability in precipitation.”

Prior research has shown that well over a quarter, or 28 percent, of water used within the average household is the result of toilet flushing. While the Environmental Protection Agency says that installing low-flow or water-conserving toilets will result in the greatest savings in household water use, fewer than 2 percent of the surveyed adults realized this, according to the study.

“That, to me, was really surprising,” Attari said. “We may be underestimating how much water toilets use because we use them frequently throughout the day.”

A standard toilet uses about 3.5 gallons of water per flush, while a low-flow toilet uses 1.6 gallons or less, Attarai noted.

“Reducing the number of times you flush – if it's yellow, let it mellow – would also decrease the amount of water you use in the home,” she said.

Experts say that after installing a water-efficient toilet, the next greatest water saver is a high-efficiency clothes washer. While a standard top-loading washer will use about 34 gallons per load, a high-efficiency front-loading clothes washer will use less than 15 gallons.

Yet when asked to name the single best thing Americans could do to conserve water, roughly 43 percent of the survey participants said that taking fewer, or shorter, showers would save the most water.

The next most popular response – roughly 17 percent of those surveyed – said they would turn off the water while doing other activities, including brushing their teeth.

Attari said that taking shorter showers would help to save water and shouldn't be discounted. However, the savings are less than many people perceived.

"The average length of a shower is 8.2 to 8 minutes," Attari said. "So if you were to decrease the length of the shower from 8 minutes to 5 minutes, that would save roughly 8 percent of your total water use in the home."

Water resources expert Peter Gleick, of the Pacific Institute in Oakland, Calif., has estimated that humans require 13.2 gallons of clean water each day to meet basic needs. In 2005, the average American was estimated to use about 98 gallons per day.

In New Mexico's largest city, overall water usage in both home and commercial settings was 148 gallons per person per day, and the Albuquerque Bernalillo County Water Utility Authority set a goal of reaching 135 gallons per person per day by 2022.

However, it wasn't only personal use of water that people had a loose grasp on in the survey. They also tended to underestimate how much water was "embodied," or used to cultivate, different food staples.

Asked to estimate how much water was used to produce a pound each of sugar, rice, cheese and coffee, the survey respondents said they were all about the same.

In reality, the staples require vastly different amounts of water: 157 gallons were required to make a pound of sugar; 299 gallons for a pound of rice; 606 gallons for a pound of cheese and a whopping 2,264 gallons for a pound of coffee.

"People don't realize how much embodied water is in the different foods that we eat," Attari said.

The author said that Americans had a somewhat better sense of water usage than they did of power usage. She said this was understandable as energy was transformed into many different things – light, heat, motion, sound, etc. Water was much more familiar, although rarely considered.

"Water is a really essential but neglected resource," Attari said. "We need to start paying more attention to water just in general."

Attention urged to improve Buffalo Creek-area pollution

Outlet: Chicago Tribune - Online

Representatives of communities in the Buffalo Creek area were told of water quality tests that showed contamination and urged to take steps to protect the water and fish and wildlife habitat as plans move

forward to expand the storage capacity of Buffalo Creek Reservoir.

Members of the Buffalo Creek Clean Water Partnership have been meeting regularly with the goal of improving the watershed. Involved communities include Arlington Heights, Buffalo Grove, Deer Park, Kildeer, Lake Zurich, Long Grove, Palatine as well as Lake County.

Results of studies were presented at last week's meeting as well as updates on grant applications to aid efforts to improve water quality at Buffalo Creek, which runs through all of these communities, the Buffalo Creek Reservoir just west of Arlington Heights Road and north of Lake Cook Road, and Albert Lake, located at the northwestern border of Long Grove and Kildeer.

"Here's the problem," said Jeff Weiss, founder of the partnership. "Back in 1950, there were 2,300 residents in the Buffalo Creek area and 79,000 in 2010. Lots of roads, parking lots and driveways have been put in and these areas of impervious surface cause problems and lead to pollution."

Weiss and his team have been recording water flow increases and sampling water at 13 sites along the 27 miles of Buffalo Creek for the last year. These water samples have been tested for seven pollutants including phosphorus, chloride, fecal contamination and dissolved oxygen levels and compared against standards set by the Illinois Environmental Protection Agency.

The team found impairments and high concentration levels of most of these elements which impact flora and fauna in the creek, reservoir and Albert Lake. Although the creek has nothing to do with area drinking water, which comes from Lake Michigan, Weiss and watershed coordinator Marcy Knysz were asked about residents fishing in the three bodies of water. Some of these dangerous pollutants, particularly chloride, which is generated by road salt, could increase in the weeks ahead, they said.

"As of last week, with the snow beginning to melt and road salt runoff, we saw much higher levels that are toxic to aquatic plants and potentially pollutes our groundwater and soils," Weiss said. "Last week, the Lake County Health Department monitored five locations and four of them came in at a level above the water quality standard."

The highest level of chloride in Buffalo Creek was at Schaeffer Road in Cook County at Creekside Park, he said.

Kathleen Paap, a water quality specialist with the Lake County Health Department, identified shoreline erosion in her report and water quality tests that mirrored those collected by Weiss. She also found levels of fecal coliform in two sites along Buffalo Creek. Weiss said he found elevated levels of this fecal bacteria in 14 sites in October and Knysz, who collected samples last year without gloves with a cut on her hand, had to go to the hospital with a significant infection afterward, she said.

"I wouldn't eat fish out of there," Knysz said, "but again, I'm a vegetarian."

Paap recommended reducing the carp population in the watershed, deepening the basins to embellish the fish population, and improving the water quality as well as the fish and wildlife habitat as other agencies create preliminary designs to expand the storage capacity of the reservoir by 20 percent by

2016.

Dean Maraldo, chief of the water enforcement branch of the U.S. Environmental Protection Agency, Region 5, and a Buffalo Grove resident, also weighed in, encouraging the team to capture as much wet weather data in the months ahead as possible to better determine where the water pollution is coming from. He also recommended developing restoration goals, potential alternatives to control runoff, and encouraged the group to identify green infrastructure opportunities.

The partnership is eight months into a two-year process to create an action plan to improve the Buffalo Creek watershed. Knysz, who volunteers for the project with Weiss, said they're ahead of schedule to meet the 2015 goal of creating an action plan.

Buffalo Creek Clean Water Partnership plans to invite residents to the next meeting in May to discuss green infrastructure.

WATER POLLUTION: Ballast, emission regs for shipping fleet up for review

Outlet: Environment & Energy Daily

A House Transportation and Infrastructure subcommittee tomorrow will probe the impact that several recent or looming environmental regulations may have on the country's shipping fleets.

Environmental groups fought for years to have new ballast water standards set for the industry in order to protect American waters from invasive species.

To provide stability during sea voyages, commercial vessels take in millions of gallons of water before heading out. When they arrive at U.S. shores, the ships then release that ballast water -- along with organisms that hitched a ride in it. Some of those species take up residence there, outcompeting native species and spreading disease. In the Great Lakes, invasive zebra and quagga mussels have caused billions of dollars' worth of problems for power plants by clogging water intake pipes.

The U.S. Coast Guard in 2012 finalized a rule that required new ships to install certified ballast water treatment systems beginning in December of last year. But only two independent laboratories have been certified to do the approval testing, according to a committee memo laying out the issue for tomorrow's hearing. And so far, no treatment systems have yet been approved, it says.

Last fall, the Coast Guard told vessel owners how to apply for an extension for installing treatment systems, but they could still be caught in noncompliance with the Clean Water Act because U.S. EPA separately promulgated a regulation related to vessel discharges that set the same ballast water standard, as well as best management practices for 26 other types of discharges. The type of approval required by the Coast Guard rule does not apply to the EPA rule, though, and the agency has not offered an option for an extension.

According to the Transportation and Infrastructure memo, EPA told vessel owners in December that if

they accepted the extension for the Coast Guard regulation, they would still be in violation of the Clean Water Act but that the agency would "consider such violations ... a low enforcement priority."

Meanwhile, environmental groups are challenging the EPA standards, which they say aren't strict enough. Greens have pushed for standards that are 100 or even 1,000 times stricter.

The Subcommittee on Coast Guard and Maritime Transportation will meet tomorrow to discuss the situation, as well as the impact of International Maritime Organization rules requiring that ships within North American waters burn low-sulfur fuel or install scrubbers in their exhaust systems.

E.P.A. Says It Will Fight Mine Project in Alaska

Outlet: New York Times - Online, The

Federal environmental regulators, citing risks to water quality and salmon spawning grounds in one of the world's richest fisheries, moved on Friday to block the development of a giant open-pit copper mine in the watershed of Bristol Bay in southwest Alaska.

While the decision by the Environmental Protection Agency was not an outright death blow to the project, called the Pebble Mine, it left little room for the mine and its supporters to persuade the agency otherwise. E.P.A. officials said they would now start gathering additional information and public comment under a provision of the federal Clean Water Act that could end any chance of the mine project's going ahead.

The agency's administrator, Gina McCarthy, was unequivocal in saying that the science, including a three-year peer-reviewed study by the E.P.A. completed this year, had spoken.

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The vast size of the proposed mine, with its attendant waste products, would harm the water, the economy and the culture, she said. The region's unique ecosystem produces almost half the world's supply of wild sockeye salmon and is the spawning ground for all five species of Pacific salmon: sockeye, coho, chinook, chum and pink.

"The Bristol Bay watershed is indeed one of the most productive ecosystems on the planet," Ms. McCarthy said. And the Pebble Mine, as it has been proposed in size and scope, she added, would cause "significant and irreversible negative impacts."

The mine is deeply controversial in Alaska, and had been further politicized in recent weeks, with Senator Mark Begich, a Democrat running in a hard-fought re-election campaign, coming out strongly against the project in January, calling it "the wrong mine in the wrong place." Many other elected officials, including Gov. Sean Parnell, a Republican, have either supported the project or have argued that the permit process should at least go forward without E.P.A. intervention.

Federal officials emphasized in the announcement on Friday that their examination of Bristol Bay and the Pebble Mine had come at the request of native Alaskan tribes in the region. The resulting investigation, begun in 2010, concluded in a final draft report in January that the mine, even without accidental spills or discharges, presented a threat of serious harm.

Depending on the size of the mine, 24 to 94 miles of salmon-supporting streams and 1,300 to 5,350 acres of wetlands, ponds and lakes would be destroyed, the study said. A transportation corridor to support the mine, the study said, would also cross wetlands and about 64 streams and rivers in the Kvichak River watershed, 55 of which are known or likely to support salmon.

The mine's developers, the Pebble Partnership, said in a statement in January, when the final draft of the E.P.A.'s scientific study was released, that the research was flawed by considering only a hypothetical proposal of what the project might be, since specific permit requests had not even been filed, and by not adequately taking into account state-of-the-art engineering safeguards that would be put in place.

BRISTOL BAY: Alaska may sue over EPA veto process for Pebble mine

Outlet: E&E News PM

Alaska Republican Gov. Sean Parnell is holding open the possibility of litigation in response to U.S. EPA intervention against the Pebble copper and gold mine in the Bristol Bay region.

Parnell spokeswoman Sharon Leighow called EPA's announcement Friday that it would begin weighing whether to veto key Army Corps of Engineers permits for the mine an "egregious action" that "goes beyond federal overreach."

Leighow, describing the situation as EPA usurping the rights of Alaskans to help decide Pebble's fate, said, "The state is prepared to pursue all legal options to ensure Alaska's rights are protected."

On Friday, Pebble executives said they and Alaska Attorney General Michael Geraghty (R) had asked EPA's Office of Inspector General to investigate the recently released EPA Bristol Bay watershed assessment, which found the mine would have negative effects on the area's salmon fishery.

Geraghty and Pebble are already in litigation against the Lake and Peninsula Borough, which passed a ballot initiative in 2011 to block mining projects that could have a "significant adverse impact" on salmon populations.

The next step is for Pebble, Alaska and the Army Corps to respond to an EPA letter outlining the review process for the potential permit veto under the Clean Water Act.

"Consistent with the law and the best scientific information available and through a transparent public process," the letter said, "the agency will examine whether the environmental effects of potential discharges associated with mining at the Pebble deposit are unacceptable under the CWA."

Reactions have continued to pour in for and against EPA's intervention. Alaska lawmakers and mining lobby groups say the agency is once again overstepping and threatening to jeopardize the broader economy.

Alaska GOP Rep. Don Young said the potential Pebble veto "shows an agency corrupted by politics" and seeking "to broaden its reach until their tentacles encumber every aspect of American life."

"I will be very clear," Young added. "This overstep by the EPA today could mean the loss of our state to the federal government."

National Mining Association CEO Hal Quinn said, "It seems that it can never be too soon or too late for EPA to interfere with projects and destroy the economic and job opportunities they bring for Americans."

And Laura Skaer, executive director of the American Exploration and Mining Association, said, "This unprecedented action has sent a chill across the entire investment and business community and has wasted millions of dollars of taxpayers' money."

Responses in favor

Pebble opponents, however, say they were expecting mining advocates to attack both EPA's watershed assessment and the legality of its action under the Clean Water Act.

"The science is sound, EPA's legal authority is clear and the people of Bristol Bay have demanded protection," said Natural Resources Defense Council Western Director Joel Reynolds. "It's time to say no to Pebble Mine."

Sen. Maria Cantwell (D-Wash.) and Reps. Suzanne Bonamici (D-Ore.) and Jim McDermott (D-Wash.) were among the lawmakers who released statements expressing support for the agency's action.

Even though EPA may take months to decide whether to act against the mine, The New York Times editorial board thought it was unlikely the agency would initiate a review and end up backing off.

"Given the science, this is not the hardest environmental decision the administration has faced or will face," the newspaper wrote in an editorial this weekend.

The Times said the Obama administration had a list of environmental issues to review, including how to protect the sage grouse. "But on Bristol Bay," said the editorial, "it is headed in just the right direction."

10 hours and 50 amendments later, House committee passes water bill

Outlet: Charleston Gazette - Online, The

At 1:32 a.m. on Monday, more than 10 hours after its meeting was to begin, the House of Delegates Judiciary Committee passed a bill aimed at protecting drinking water, in the wake of January's Elk River

chemical leak.

The bill passed after consideration of more than 50 amendments, some of which passed with very brief, verbal explanations.

One new provision would require the state Bureau for Public Health to implement a long-term medical monitoring study of health effects from the chemical leak. It does not stipulate any funding source, but anticipates some sort of grant from federal agencies.

The committee was discussing its third different version of the bill and was on its third day of discussion. Prior versions have already been submitted by the governor, passed two Senate committees, passed the full Senate and passed the House Health Committee.

The Judiciary Committee began its meeting nearly two hours late on Sunday after members of both parties held private caucuses.

Barring a suspension of legislative rules, time is running short on the bill. It must pass the House Finance Committee, be read for three days, be approved by the House and then re-approved by the Senate, perhaps with a conference committee as well, by midnight on Saturday.

Last week, a group of 27 delegates wrote to Gov. Earl Ray Tomblin requesting a special session to work on the bill, but that idea was discouraged by House and Senate leadership.

The bill requires the state Department of Environmental Protection to compile an inventory of every above-ground storage tank – like the tank that leaked at Freedom Industries' tank farm -- in the state.

An amendment that would have allowed citizens to sue companies or the DEP to enforce the provisions of the bill was defeated, 15-10, with mostly Republicans voting against it.

Citing terrorism concerns, delegates overwhelmingly amended a section of the bill that excludes the location and contents of chemical tanks from Freedom of Information Act requests.

There are already several exemptions in state FOIA law that govern homeland security issues.

Federal law requires the state to make chemical inventories public, through FOIA. It was unclear if the amendment would conflict with federal law, as text of the amendment was only made available to delegates.

If the bill becomes law, above ground storage tanks within a "zone of critical concern" would have to be inspected annually by the DEP.

The zone of critical concern is different for every water system, depending on the speed of the waterway. It comprises an area within 1,000 feet of a river and within a five-hour flow upstream of any water intake point.

All other tanks would be inspected by an industry-hired engineer. An amendment that would have

required the DEP to audit a small portion of those private inspections, for quality control, was rejected.

Another amendment would have required that tanks be emptied and their interior be inspected within five years, and then once every 10 years after that.

A representative from the DuPont chemical plant in Belle discouraged the committee from the requirement, saying it could open inspectors up to harm.

Delegate John Pino, D-Fayette, spoke against the amendment saying we should defer to industry for how to best regulate.

"We think we can micromanage things and tell others how to do their jobs," Pino said. "No one has more experience than the industry when it comes to handling these tanks."

The definition of above ground storage tank in the bill is very specific. It includes tanks that hold more than 1,320 gallons and are more than 90 percent above ground. If the tank is mobile, it is only included if it stays in the same spot for more than 60 days. The bill excludes from inspection "process vessels," defined as "vessels utilized in a facility in the manufacturing process through which there is a steady, variable, recurring or intermittent flow of materials."

Evan Hansen, a Morgantown environmental consultant who was consulted on the bill, called the 1,320-gallon threshold a "major problem."

Hansen said that the drafters of the bill misunderstood an Environmental Protection Agency regulation called the Spill Prevention, Control and Countermeasure Rule,

"This is taken from SPCC regulations, but in SPCC, 1,320 is the aggregate volume for a site and not the volume for a single tank," Hansen wrote in an email to environmental groups. "This 1,320 gallon volume is misapplied in the new definition and should be changed to an aggregate volume."

Previous versions of the bill had a long list of industry suggested exemptions from inspection. This version removes the list of exemptions. If tank owners think their tanks are already regulated by another agency, they can submit the information to the DEP, who can then choose to issue exemptions.

Under the bill, every water utility must complete a source water protection plan, outlining how it would respond to a crisis. Utilities would have to provide detail on how much water storage capability they have and they would have to study the feasibility of adding a second water intake or additional water storage.

Many have criticized West Virginia American Water for not shutting off its water intake when it learned of the spill, but the company has stood by the decision, saying that without a second intake, it would have been much worse to shut down the intake.

Several Kanawha County delegates proposed an amendment that would force West Virginia American to add a second intake, which could cost up to \$100 million. They proposed funding it through gas severance tax revenue, so that the price would not be passed on to ratepayers.

The amendment was defeated as delegates objected to using tax money to fund West Virginia American — a profitable private corporation.

Activists hope report spurs action

Outlet: Toledo Blade - Online

Excess fertilizers and raw human waste are hardly new problems for western Lake Erie.

But clean-water advocates are hoping a long-awaited report issued last week by the International Joint Commission will put more pressure on the U.S. and Canadian governments to rally around the issue, one that many see as having been dragged out by painstaking bureaucracy and not enough meaningful action.

In its report, "A Balanced Diet for Lake Erie: Reducing Phosphorus Loadings and Harmful Algal Blooms," the IJC — a State Department-level commission assigned since 1909 to help the two countries resolve mutual boundary water issues — laid out 16 recommendations after collaborating with more than 60 U.S. and Canadian scientists.

The recommendations include: calls for better management practices for agriculture, including better timing for fertilizer application, mandatory certification standards for applicators' tying crop insurance to soil-conservation performance, and something pretty basic that lake scientists have been urging for years: a ban on manure applications to cropland when the soil is frozen or has snow on it.

The recommendations also call for better sewage controls, including mandatory septic-system inspections, and more work in wetland restoration, a mandatory elimination of phosphorus in lawn fertilizers, and the establishment of a cap on nutrient pollution under the Total Daily Maximum Load provisions of America's Clean Water Act, known in environmental circles by the abbreviation TMDLs.

The commission's recommendations differ in scope from others — including the latest report issued last fall by the state of Ohio's phosphorus task force — as well as the number of mandatory actions it seeks. Many state-level efforts, including legislation now before the Ohio General Assembly, continue to be largely voluntary and incentive-laden programs to minimize impact on the farming industry. One of the biggest criticisms of the pending legislation in Ohio is that it does nothing to address growing concerns about manure generated in the Lake Erie basin by livestock farms big enough to be classified as concentrated animal feeding operations, or CAFOs.

The binational commission's recommendations came in response to Lake Erie's record algae bloom of 2011.

Last September, Ohio hit a new low in its ongoing battle against algae, though, when the tiny municipal water treatment plant that serves 2,000 customers in Ottawa County's Carroll Township was so overwhelmed by a toxin called microcystin that the facility was forced offline. Public officials frantically

warned people not to drink the water until further notice, using Facebook, Internet Web sites, and any other form of rapid communication they could.

The event marked the first time in Ohio's history that a water-treatment plant was so overpowered by an algae toxin that it had to be taken out of service. It has become a case study for water treatment plant operators nationally.

"The U.S. Environmental Protection Agency and Environment Canada have a duty to residents to develop a TMDL or TMDL-like plan for nutrient reduction and ensure that state and provinces are implementing the plan," Kristy Meyer, Ohio Environmental Council managing director of agricultural, health, and clean water programs, said.

Neither federal agency issued a response to the recommendations, though both have been largely in support of general phosphorus-reduction efforts for decades.

Runoff and sewage overflows into the Maumee River are cited as the source of 43 percent of the lake's nutrient pollution.

The report also said more research needs to be done along the Detroit River to understand the impact of untreated releases from the Detroit Wastewater Treatment Plant, the largest in North America but also one that has been plagued by operational problems, in large part because of Detroit's financial struggles.

In 2011, 3.2 billion gallons of diluted raw sewage and 1.2 million pounds of phosphorus flowed down from that plant to Lake Erie, the report said.

"There seems to be this mystical Ohio/Michigan/Ontario line in the water when it comes to the research, with little understanding of how sources from Ohio, Michigan, Indiana, and Ontario collective play a role," Sandy Bihn, Lake Erie Waterkeeper executive director, said.

The TMDL process, as bureaucratic as it sounds, could result in a more holistic and integrated investigation, advocates said.

The report also calls for a better understanding of how placement of dredged silt from the Toledo shipping channel into north Maumee Bay may be contributing to algae growth. Some scientists, such as the University of Toledo's top algae researcher, Tom Bridgeman, have said the long-standing practice is a contributing source of that pollution.

For Love of Water, or FLOW, a group founded by one of the Great Lakes region's top water-rights attorneys, Traverse City's Jim Olson, lauded the International Joint Commission for what it called a "forward-thinking approach" for its commitment to the public trust doctrine.

The public trust doctrine guarantees people the right to fish, boat, swim, and recreate in Lake Erie — to enjoy the protection of water quality and quantity free of impairment, the group said.

"We applaud the IJC for its foresight and guidance on one of the greatest threats to the Great Lakes, and

urge the states to immediately implement and evaluate actions necessary to address nutrient runoff problems,” Mr. Olson said. “The call for a public trust framework recognizes a benchmark adopted by the courts of all eight Great Lakes states and Ontario. This benchmark means governments must act. They have an affirmative duty.”

In its report, the IJC said the governments of the eight Great Lakes states and Ontario “should apply a public trust framework consisting of a set of important common law legal principles shared by both countries.”

University of Michigan researchers who generated data for the commission's report said the region should strive to cut nutrient pollution by nearly half in the coming years. Ohio's phosphorus task force made a similar recommendation in the fall.

“The new target is very ambitious, but is achievable if the region agrees to adopt agricultural practices that help reduce the amount of phosphorus-bearing fertilizer washing off fields,” Don Scavia, an aquatic biologist who serves as director of UM's Graham Sustainability Institute, said.

Without a strong commitment to reducing phosphorus and other nutrients, Lake Erie's algae problem will worsen as the effects of climate change become more acute, researchers said.

“Potential impacts of climate change need to be taken into consideration for effective action,” team member Nathan Bosch of Grace College in Winona Lake, Ind., said.

Climate warming “can cause preferred habitat to be squeezed both from above by warmer temperatures and from below via increase [algae],” another team member, Tomas Hook of Purdue University, said.

Editorial: Keep sewage out of Lake Union, Lake Washington and Puget Sound

Outlet: Seattle Times - Online

The time has long passed for the marine environment or for the public to tolerate the dumping of sewage into Puget Sound, Lake Washington, Lake Union and the Lake Washington Ship Canal.

The federal Environmental Protection Agency should act on a request by the state Department of Ecology, the state Department of Health and the Puget Sound Partnership to prohibit dumping of sewage in these waterways.

Not only have the number of discharge stations increased around Puget Sound, the availability of sizable grants to build these stations has also grown.

Recreational and commercial vessels can pump out and dispose of human waste into facilities connected to sewer lines, septic tanks or holding tanks until it is hauled away. Mobile, floating units go to where the boats are.

More and more options exist — or could exist — at public and working marinas.

Citing the competition for use by thousands of pleasure boats is not an argument for prohibiting the dumping of partially treated sewage within three miles of shore. The numbers only make the point about the volumes and hazards that exist.

Marine sanitary devices are hardly pristine treatment plants. All the technical numbers about colony-forming units of fecal coliform bacteria work against vessel owners. The discharge ratings are vastly beyond any tolerable levels for shellfish beds or public recreation areas.

The state Department of Ecology is now collecting comments on a Draft Petition to Designate the Waters of Puget Sound as a No Discharge Zone. The comment period is open into April.

A final version will go to the EPA, which would start its own review process.

If this issue were about pollution of Lake Erie and the Cuyahoga River, consider this as long after the fire had broken out. The marine-discharge issue cannot be diluted. The problem and the remedy are both well-known.

Florida's water woes are seen as urgent -- except in the House

Outlet: Tampa Bay Times - Online

A remarkable alignment of Florida political interests has occurred this year — perhaps because it's an election year, perhaps because the urgency of the problem has drawn a lot of attention.

Gov. Rick Scott, several powerful state senators, a coalition of environmental groups and a consortium of business and industry groups all say the Legislature needs to do something this year about fixing Florida's water.

The pollution is too pervasive, the flow too endangered, and the perils too great to the state's future to ignore it any longer, they all agreed.

"Water quality and quantity have the potential to limit residential and business growth, and we need to attack this problem head-on with forward-thinking solutions," Tom Feeney, president of the probusiness Associated Industries of Florida, said in February.

A rally for clean water drew 200 people to Tallahassee last month, all clamoring for quick action. One speaker, former Department of Community Affairs secretary Tom Pelham, told the crowd, "The time to act is now. Delay will only make the situation worse and the solutions more costly."

The House is the one place where there's no such sense of urgency.

"I don't foresee any major changes to water policy this year," said Speaker-designate Steve Crisafulli, R-Merritt Island.

The reason, said the man who will be speaker next year, is simple: "It's going to take more than a year to solve this problem."

Crisafulli, who hails from a prominent citrus family and is former president of the Brevard County Farm Bureau, pointed out that Florida's water problem is actually a whole suite of woes involving both water quality and water quantity.

"Nobody has really come up with one silver bullet answer," he said in an interview a day before the clean water rally.

In Crisafulli's backyard lies the Indian River Lagoon, which has been battling pollution that likely fueled a series of toxic algae blooms blamed for wiping out 40,000 acres of sea grass. Since then hundreds of manatees, dolphins and pelicans have died, too. Scientists are not sure if the deaths are related to each other or to the pollution and sea grass die-off.

Meanwhile the state's iconic springs — many of them owned by the taxpayers as part of the state park system — have suffered from increased pollution, toxic algae blooms and a loss of flow that some have blamed on overpumping of the aquifer by agriculture and development interests.

Further south, the Caloosahatchee River on the west coast and the St. Lucie River on the east coast have born the brunt of polluted water released from Lake Okeechobee by federal officials trying to lower the water level before it breaches the berm surrounding the lake.

The emergency releases have fouled the estuaries of both rivers, hurting their sea grass beds and marine life and causing economic consequences for fishing and tourist industries.

Water supply has become a prickly issue. In Apalachicola, the oyster industry that has long tied the town together is failing and Scott is suing Georgia in the U.S. Supreme Court for holding back too much water that normally flows down to Florida.

Niagara Bottling's Groveland plant overcame strong opposition to get a permit to boost its pumping from the aquifer from 484,000 gallons a day to 910,000 gallons. The Adena Springs Ranch near Silver Springs has faced similar opposition to its request for a permit to pump 5.3 million gallons daily for its proposed cattle operation.

Meanwhile, a coalition of five of Central Florida's fastest-growing counties have proposed slaking their future thirst by pumping 150 million gallons per day from the St. Johns River. The proposal has proven controversial, with critics pointing out that the St. Johns is already suffering a loss of flow as well as dealing with pollution-fueled algae blooms.

None of these are new problems. They all date back at least a year and, in the case of both the springs and the Lake Okeechobee releases, a decade or more. But finding the political will to deal with them has been difficult. Just last year, for instance, Scott vetoed money for tracking the pollution in Indian River Lagoon.

One thing all of these problems appear to have in common is the type of pollution involved — nitrate pollution, made up of excess nitrogen and phosphorus, from wasted fertilizer, animal waste and leaking septic tanks. Scott's administration fought hard to wrest away from the U.S. Environmental Protection Agency the power to regulate nitrate pollution, and now must grapple with it in waterways across the state.

Last year thousands of people petitioned Scott for more protection and restoration for the state's springs. Local government officials in North Florida formed a group to push for springs legislation. However, no springs bill passed.

The Legislature did agree last year to spend \$10 million for springs protection, far from the \$122 million in projects that the state's five water management districts had listed as essential to springs restoration.

This year, Scott has proposed the Legislature appropriate \$55 million to restore and protect the state's springs. The Senate is ready to spend even more than that. A coalition of Senate committee chairs has drafted a bill to raise nearly \$400 million a year for springs from documentary stamp taxes on real estate transactions, using it for hooking septic tank users up to central sewer lines in the regions around major springs.

There's also a Senate bill to spend \$220 million to protect the Indian River Lagoon and to redirect the damaging water releases from Lake Okeechobee.

Crisafulli doesn't like the dollar figure on the Senate's springs bill, calling it "the biggest, most unfortunate part" of any water-related measure. An amount that big "would take away the opportunity to work on other issues around the state."

He foresees putting aside an as-yet undetermined amount of money this year "to fund as much as we can, and not just focus on one region." There will be no comprehensive fixes, just individual projects that offer a chance for improvement — for instance, removing 6 million cubic yards of polluted muck from the bottom of the Indian River Lagoon.

Resolving all of Florida's water problems, he said, "is going to take a commitment continuing out for an indefinite number of years." That's how to resolve what's needed for any new state water policy, he said.

Ironically, according to Estus Whitfield, who served as an aide to governors from Reubin Askew to Jeb Bush, "Florida has had a water policy, the most widely acclaimed in the U.S., for over 40 years."

So how did things get so messed up? "Thanks to a lack of conviction and implementation by our state government, and with a little help from our friends in the business and ag industries," Whitfield said, "it has not been effective in preventing the serious demise of our water resources."